



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference 2F04063-PCT | FOR FURTHER ACTION See Form PCT/IPEA/416 | |
| International application No. PCT/JP2004/009202 | International filing date (<i>day/month/year</i>) 30 June 2004 (30.06.2004) | Priority date (<i>day/month/year</i>) 03 July 2003 (03.07.2003) |
| International Patent Classification (IPC) or national classification and IPC H04J 1/00, 11/00 | | |
| Applicant MATSHUSITA ELECTRIC INDUSTRIAL CO., LTD. | | |

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 4 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. (*sent to the applicant and to the International Bureau*) a total of 3 sheets, as follows:

- sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
- sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. (*sent to the International Bureau only*) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

- Box No. I Basis of the report
- Box No. II Priority
- Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- Box No. IV Lack of unity of invention
- Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- Box No. VI Certain documents cited
- Box No. VII Certain defects in the international application
- Box No. VIII Certain observations on the international application

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| Date of submission of the demand 08 February 2005 (08.02.2005) | Date of completion of this report 25 May 2005 (25.05.2005) |
| Name and mailing address of the IPEA/JP | Authorized officer |
| Facsimile No. | Telephone No. |

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/009202

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:

- international search (under Rules 12.3 and 23.1(b))
- publication of the international application (under Rule 12.4)
- international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

The international application as originally filed/furnished

the description:

pages 1-26, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

the claims:

pages 2-10, as originally filed/furnished

pages* 1, 11, 12, as amended (together with any statement) under Article 19

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

the drawings:

pages 1-13, as originally filed/furnished

pages* _____ received by this Authority on _____

pages* _____ received by this Authority on _____

a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:

the description, pages _____

the claims, Nos. _____

the drawings, sheets/figs _____

the sequence listing (*specify*): _____

any table(s) related to sequence listing (*specify*): _____

4. This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

the description, pages _____

the claims, Nos. _____

the drawings, sheets/figs _____

the sequence listing (*specify*): _____

any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|----------------------|-----|
| Novelty (N) | Claims | 2, 5, 6, 10, 12 | YES |
| | Claims | 1, 3, 4, 7, 8, 9, 11 | NO |
| Inventive step (IS) | Claims | 2, 5, 6 | YES |
| | Claims | 1, 3, 4, 7-12 | NO |
| Industrial applicability (IA) | Claims | 1-12 | YES |
| | Claims | | NO |

2. Citations and explanations (Rule 70.7)

Document 1: JP, 11-055210, (Nippon Telegraph and Telephone Corporation), February 26, 1999 (02.26.99), Paragraphs 0002 to 0007, Fig. 6

Document 2: JP, 2001-238269, A (KDDI Corp.), August 31, 2001 (08.31.01), Paragraphs 0026 and 0027

Document 3: JP, 11-027231, A (Toshiba Corporation), January 29, 1999 (01.29.99)
Paragraphs 0027 to 0029, paragraphs 0032 to 0034,
paragraphs 0038 to 0042 and paragraph 0047, FIG. 6

Document 4: JP, 2003-158500, A (NEC Corporation), May 30, 2003 (05.30.03), Claim 5

Document 5: JP, 2001-103060, A (Toshiba Corporation), April 13, 2001 (04.13.01), Full text, all drawings

Document 1 (paragraphs 0002-0007 and FIG. 6) describes measuring the quality of a plurality of received carriers to determine a carrier with favorable reception quality as a carrier for feedback.
Document 2 (paragraphs 0026 and 0027 etc.) describes measuring the quality of a plurality of carriers received at a mobile station to determine a carrier with favorable reception quality as a carrier for feedback to be transmitted from a base station.

Document 3 describes a system comprising a base station and a plurality of mobile stations, wherein a carrier is allocated in accordance with transmission environment or information volume. Also, document 3 describes employing this carrier allocation for both transmission from a base station and transmission from a mobile station.

Document 4 (claim 5 etc.) describes preferentially selecting a sub-carrier with high line quality to be used for a subsequent transmission/reception.

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Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of Box V:

Document 5 describes employing a sub-carrier with favorable reception quality to transmit/receive retransmission data. Also, document 5 describes feeding back NACK signals.

Claims 1, 3, 4 and 7-11

The inventions relating to claims 1, 3, 4, 7, 8 and 11 are found to be described in document 1.

Also, the inventions relating to claims 1, 3, 4, 7, 8, 9 and 11 are found to be described in document 2.

Further, regarding claims 9 and 10, document 1 does not clearly describe a base station device and a mobile station device. However, document 3 describes employing a carrier with favorable reception quality in either transmission from a base station or transmission from a mobile station. Therefore, comprising the technology described in document 1 in the base station and mobile station described in document 3 is found to be within a scope in which a party skilled in the art could design.

Claim 12

Feeding back CQI, ACK or NACK signals is well-known art. For example, document 2 (paragraph 0026) exemplifies that CQI information is fed back, and document 5 exemplifies that NACK signals are fed back.

Claims 2, 5 and 6

The inventions relating to claims 2, 5 and 6 are not described in any of the documents cited in the ISR; nor are they obvious to a party skilled in the art.